Amendment dated March 16, 2010 Reply to Office Action of February 18, 2010

AMENDMENTS TO THE CLAIMS

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- An agent that specifically binds focal adhesion kinase 1. (Currently amended) and induces apoptosis in a cell that expresses focal adhesion kinase; wherein said agent comprises the amino acid sequence of SEQ ID NO: 3.
 - 2. (Cancelled)
- 3. (Currently Amended) The agent of claim 2, wherein the agent is a chimeric molecule that comprises the amino acid sequence of SEQ ID NO: 1-and/or 3 and a membrane permeabilization domain.
- A method for inducing apoptosis in a cancer cell, the method 4. (Withdrawn) comprising contacting the cancer cell with an agent that specifically binds focal adhesion kinase at a site that is specifically bound by a peptide comprising the amino acid sequences of SEQ ID NO:1 and/or SEQ ID NO: 3.
- 5. (Withdrawn) The method of claim 4, wherein the agent comprises the amino acid sequence of SEQ ID NO:1 and/or SEQ ID NO: 3 or variants thereof.
- A composition comprising SEQ ID NO: 1 and/or SEQ ID 6. (Currently Amended) NO: 3, fragments, variants or derivatives thereof, wherein the composition binds focal adhesion kinase (FAK) and modulates cellular apoptosis, cell motility and cell metastasis.
- 7. (Original) The composition of claim 6, wherein the composition further comprises a cellular permabilization domain.
- 8. (Original) The composition of claim 6, wherein the composition is administered to a cell.

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- 9. (Original) The composition of claim 6, wherein apoptosis is induced in a tumor cell.
 - 10. (Original) The composition of claim 6, wherein cell motility is inhibited.
 - 11. (Original) The composition of claim 6, wherein metastasis of a cell is inhibited.
- 12. (Withdrawn) A method of treating cancer comprising:
 administering to a patient a composition comprising SEQ ID NO: 1 and/or SEQ ID NO: 3, derivatives, fragments and variants thereof;

contacting a cancer cell the composition;

binding of the composition to focal adhesion kinase at a site that is specifically bound by a peptide comprising an amino acid sequence of SEQ ID NO:1 and/or SEQ ID NO:3, derivatives, variants and fragments thereof; and, treating cancer.

- 13. (Withdrawn) The method of claim 12, wherein the composition enters a cell via a cellular membrane.
- 14. (Withdrawn) The method of claim 12, wherein the composition induces apoptosis in an abnormal cell expressing focal adhesion kinase.
- 15. (Withdrawn) The method of claim 12, wherein the composition inhibits cell motility.
- 16. (Withdrawn) The method of claim 12, wherein the composition inhibits metastasis of a tumor cell.

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- 17. (Withdrawn) The method of claim 12, wherein contacting a cell with the composition induces apoptosis and/or inhibits cell motility and or metastasis.
- 18. (Currently Amended) A composition comprising a chimeric molecule comprising amino acid sequence SEQ-ID-NO:1and/or-SEQ ID NO: 3, derivatives, fragments or variants thereof, and a targeting domain.
- 19. (Original) The composition of claim 18, wherein the targeting domain is a membrane permeabilization domain.
- 20. (Original) The composition of claim 19, wherein the membrane permeabilization domain is an HIV TAT domain.
- 21. (Original) The composition of claim 18, wherein the targeting domain is an antibody specific for a tumor antigen.
- 22. (Original) The composition of claim 21, wherein tumor antigens comprise HER-2/neu; intestinal carboxyl esterase (liver, intestine, kidney); alpha-fetoprotein (liver); M-CSF (liver, kidney); MUC1 (glandular epithelia); p53; PRAME (testis, ovary, endometrium, adrenals); PSMA (prostate, CNS, liver); RAGE-1 (retina); RU2AS (testis, kidney, bladder); survivin; Telomerase; WT1 (testis, ovary, bone marrow, spleen); CA125 (ovarian).
- 23. (Withdrawn) A vector expressing amino acids as identified by SEQ ID NO: 1 and/or SEQ ID NO: 3, derivatives, fragments and variants thereof.
- 24. (Withdrawn) The vector of claim 23, wherein SEQ ID NO: 1 and/or SEQ ID NO: 3, derivatives fragments and variants thereof are expressed in a tumor cell.

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- 25. (Withdrawn) A vector comprising a focal adhesion kinase binding chimeric molecule.
- 26. (Withdrawn) The vector of claim 25, wherein the chimeric molecule comprises a focal adhesion kinase binding molecule and a second domain.
- 27. (Withdrawn) The vector of claim 26, wherein the focal adhesion kinase binding domain is identified by SEQ ID NO: 1 and/or SEQ ID NO: 3, derivatives, fragments and variants thereof.
- 28. (Withdrawn) The vector of claim 26, wherein the second domain is an effector molecule.
- 29. (Withdrawn) The vector of claim 28, wherein the effector molecule modulates the activity of a tumor cell.
- 30. (Withdrawn) The vector of claim 28, wherein the effector molecule is cytotoxic to a tumor cell.
- 31. (Withdrawn) The vector of claim 28, wherein the effector molecule is antiangiogenic.
 - 32. (Withdrawn) A method of treating a cancer patient comprising: administering a chimeric fusion protein composition to a patient; and, contacting a tumor cell with the chimeric fusion protein composition; modulating the activity of the tumor cell; thereby, treating a cancer patient.

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33. (Withdrawn) The method of claim 32, wherein the chimeric fusion molecule

comprises a first domain which binds to focal adhesion kinase molecules in or on a cell.

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- 34. (Withdrawn) The method of claim 33, wherein the focal adhesion kinase molecule binding first domain of the chimeric fusion protein is identified by SEQ ID NO: 1 and/or SEQ ID NO: 3, derivatives, fragments and variants thereof.
- 35. (Withdrawn) The method of claim 32, wherein the chimeric fusion protein composition comprises a second domain comprising a cell permeabilization domain.
- 36. (Withdrawn) The method of claim 32, wherein the activity of a tumor cell is apoptosis, motility and invasion.
- 37. (Withdrawn) The method of claim 32, wherein the chimeric fusion protein composition induces apoptosis in a tumor cell.
- 38. (Withdrawn) The method of claim 32, wherein the chimeric fusion protein inhibits cell motility and invasion.
- 39. (Withdrawn) The method of claim 32, wherein the chimeric fusion protein inhibits metastasis of a tumor cell.
- 40. (Withdrawn) The method of claim 32, wherein the chimeric fusion protein is co-administered with one or more chemotherapeutic agents.
- 41. (Withdrawn) The method of claim 40, wherein the chemotherapeutic agent comprises cyclophosphamide (CTX, 25 mg/kg/day, *p.o.*), taxanes (paclitaxel or docetaxel), busulfan, cisplatin, cyclophosphamide, methotrexate, daunorubicin, doxorubicin, melphalan, cladribine, vincristine, vinblastine, and chlorambucil.

42. (Withdrawn) A method of treating cancer comprising:
administering to a patient a peptide comprising SEQ ID NO: 1 and/or SEQ ID
NO: 3, derivatives, fragments and variants thereof;

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contacting a cancer cell with the peptide(s);

binding of the peptide)(s) to focal adhesion kinase at a site that is specifically bound by a peptide comprising an amino acid sequence of SEQ ID NO:1 and/or SEQ ID NO: 3, derivatives, variants and fragments thereof; and, treating cancer.

- 43. (Withdrawn) The method of claim 42, wherein the peptide(s) enters a cell via a cellular membrane.
- 44. (Withdrawn) The method of claim 42, wherein the peptide(s) induces apoptosis in an abnormal cell expressing focal adhesion kinase.
- 45. (Withdrawn) The method of claim 42, wherein the peptide(s) inhibits cell motility.
- 46. (Withdrawn) The method of claim 42, wherein the peptide(s) inhibits metastasis of a tumor cell.
- 47. (Withdrawn) The method of claim 42, wherein contacting a cell with the peptide(s) induces apoptosis and/or inhibits cell motility and or metastasis.